Wireless technology collects real-time information from oil and gas wells

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U.S. energy security and domestic oil production are increased through technology that delivers continuous electromagnetic data in oil and gas wells

Los Alamos National Laboratory (LANL) and Chevron Energy Technology Company formed the Advanced Energy Solutions Alliance in 2004 to address U.S. energy security and critical technology needs of the oil and gas industry.

One of several active projects, LANL and Chevron co-developed INFICOMM™, a wireless technology used to collect real-time temperature and pressure information from sensors in oil and gas wells, including very deep wells already producing oil and gas and drilling operations for new wells. In 2010, Chevron commercialized

INFICOMM™ as a new downhole communication technology that provides reliable, real-time communication from deep wells to the surface without the need for wires, cables or batteries. The patented system delivers continuous electromagnetic data on the reservoir conditions—pressure, temperature and flow rate—enabling economical and effective monitoring and analysis.

The collected data will improve well yields, saving producers millions of dollars per well. In addition, it will assist in enhancing oil recovery efforts that should increase domestic oil production and increase U.S. energy security.

The INFICOMM™ technology was licensed to Chevron, which sublicensed it to the start-up Infi comm, Inc., initially funded by Chevron. The first commercial units began to ship in Fall 2011.